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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/021,629	12/19/2001	Robert Alexander Mann	12560-US	9206

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EXAMINER

MITCHELL, JASON D

ART UNIT	PAPER NUMBER
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2193

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center">Office Action Summary</p>	<p>Application No.</p> <p align="center">10/021,629</p>	<p>Applicant(s)</p> <p align="center">MANN ET AL.</p>	
	<p>Examiner</p> <p align="center">Jason Mitchell</p>	<p>Art Unit</p> <p align="center">2124</p>	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 December 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>2/19/01</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to an application filed on 12/19/2001.
2. Claims 1-27 are pending in this case.

Drawings

3. **The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 224, 228, 424 and 446-449.** Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Applicant is advised that should claim 1 be found allowable, claim 11 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two

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claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claims 1 and 11 respectively recite 'an environment' and 'an apparatus', each of which would be considered a 'machine' under 35 U.S.C. 101. Amendment of one of the claims to recite 'a computer program product' (manufacture) would overcome this problem.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 1 and 8-11 are rejected under 35 U.S.C. 102(b) as being anticipated by “The Benefits of CORBA-Based Network Management” by Haggerty and Seetharaman (Haggerty).

Regarding Claims 1 and 11: Haggerty discloses (a.) an implementation of a single managed entity object class (pg. 76, col. 2, par. 5 'All objects in the model derive from one base object called a Managed Object'), the single managed entity object class being run-time derivable via type derivation (pg. 76, col. 1, par. 2 'The topology objects are created through OpenView Map additions to the MOM or by auto discovery'); into a

hierarchy of managed entity object types (pg. 77, col. 1, par. 1 'derived objects do not require much implementation since higher level objects implement most of there properties') minimizing the need to re-code and re-compile framework software application code in support of new managed entity object types (pg. 77, col. 1, par. 1 'adding support for new equipment requires only creating a new object definition, which fits into the model'); (b.) a registry for run-time registration of at least one plug-in brokering access to network management and service provisioning enabling technologies (pg. 76, col. 1, par. 2 'The topology objects are created through OpenView Map additions to the MOM or by auto discovery'); (d.) a dictionary holding a roster of function names of registered functions, the function defining methods associated with derived entity object types (pg. 75, col. 1, par. 2 'The first type consists of ... the OMG Naming Service'); and (f.) an interpreter for processing messages received from at least one network management and service provisioning software application (pg. 78, col. 2, par. 2 'integrates with OpenView') wherein a separation is achieved between managed entities, enabling technologies and software applications (Fig. 4), the separation enabling independent development, maintenance and troubleshooting in providing network management and service provisioning solutions (pg. 79, col. 1, par. 1 'ProSphere network management system ... leads to an extremely open, extensible and distributed solution').

While Haggerty does not explicitly disclose a parser/lexical analyzer for processing managed data network entity specifications/directives, these are inherent in his disclosure on pg. 76, col. 1, par. 2 'The topology objects are created through OpenView

Map additions to the MOM'. Without parsing and lexically analyzing the addition, it would have been impossible to create the managed entity object class instance. Further the disclosure that these 'topology objects' could also be created through 'auto detection' inherently requires the ability to handle 'generic' objects.

Regarding Claim 8: The rejection of claim 1 is incorporated; further Haggerty discloses the network management and service provisioning enabling technologies include support for at least one of a persistence method and a persistence entity (pg. 76, col. 1, par. 2 'The topology objects ... contain information pertaining to addressing, type, uniqueness, resources, and status').

Regarding Claim 9: The rejection of claim 1 is incorporated; further Haggerty discloses at least one directive further specifies a command sequence to be followed in using a specific registered enabling technology (pg. 76, col. 1, par. 2 'The topology objects ... contain information pertaining to addressing, type, uniqueness, resources, and status').

Regarding Claim 10: The rejection of claim 9 is incorporated; further Haggerty discloses the framework further comprises at least one registered enabling technology specific lexical analyzer stub for interpreting at least one enabling technology specific directive (pg. 78, col. 1, par. 1 'The ProSphere user interfaces use the compiled stubs from IDL to interact with the objects').

Regarding Claim 12: Haggerty discloses (a.) registering with a framework at least one plug-in brokering access to at least one network management and service provisioning enabling technology (pg. 76, col. 1, par. 2 'The topology objects are created through OpenView Map additions to the MOM or by auto discovery'); (c.) deriving a single

managed entity object class into a managed entity object type hierarchy of managed entity object types via type derivation (pg. 76, col. 2, par. 5 'All objects in the model derive from one base object called a Managed Object'); and (d.) processing at least one message received by the framework from at least one network management and service provisioning software application (pg. 78, col. 2, par. 2 'integrates with OpenView'); wherein the framework acts as an enabler by separating managed data network entities, enabling technologies and software applications (Fig. 4), as well as a facilitator therebetween in providing the network management and service provisioning solution (pg. 79, col. 1, par. 1 'ProSphere network management system ... leads to an extremely open, extensible and distributed solution').

While Haggerty does not explicitly disclose a parser for processing managed data network entity specifications, a parser is inherent in his disclosure on pg. 76, col. 1, par. 2 'The topology objects are created through OpenView Map additions to the MOM'. Without parsing the addition, it would have been impossible to create the managed entity object class instance.

Regarding Claim 13: The rejection of claim 12 is incorporated; further Haggerty discloses processing the at least one message received by the framework, the method comprises a further step of deriving a containment hierarchy of managed entity object type instances corresponding to field installed data network equipment (Fig. 4).

Regarding Claim 14: The rejection of claim 12 is incorporated; further Haggerty discloses registering with the framework at least one plug-in, the method further

comprises a step of run-time registering the at least one plug-in (pg. 76, col. 1, par. 2 'The topology objects are created through OpenView Map additions to the MOM').

Regarding Claim 16: The rejection of claim 12 is incorporated; further Haggerty discloses a step of: run-time loading the at least one managed data network entity specification (pg. 76, col. 1, par. 2 'The topology objects are created through OpenView Map additions to the MOM').

Regarding Claim 18: The rejection of claim 12 is incorporated; further Haggerty discloses wherein parsing, the method further comprises a step of: extracting at least one directive therefrom, the at least one managed data network entity specification being associated with at least one managed entity object type (pg. 77, col. 1, par. 1 'higher level objects implement most of their properties and functions').

Haggerty does not explicitly disclose extracting at least one directive from the data network entity specification said directive being associated with at least one managed entity object type, however this association is inherent in his disclosure on pg. 77, col. 1, par. 1 'higher level objects implement most of their properties and functions'. Without a directive associated with at least one managed entity object type, inheritance as disclosed could not be established.

Regarding Claim 19: The rejection of claim 12 is incorporated; further Haggerty discloses wherein deriving a single managed entity object class via type derivation, the method further comprises a step of setting at least one attribute (pg. 77, col. 1, par. 1 'the derived objects ... implement most of their properties and functions').

Regarding Claim 20: The rejection of claim 12 is incorporated; further Haggerty discloses wherein prior to processing the at least one message received by the framework from the at least one software application, the method further comprises a step of: registering the at least one software application with the framework (Fig. 2, ProSphere Application Objects').

Regarding Claim 21: The rejection of claim 12 is incorporated; further Haggerty discloses wherein processing the at least one message received by the framework; the method further comprises a step of: implementing a directive specified in the at least one managed data network entity specification using a lexical analyzer stub associated with the at least one plug-in (pg. 78, col. 1, par. 1 'The ProSphere user interfaces use the compiled stubs from IDL to interact with the objects').

Regarding Claim 22: the rejection of claim 21 is incorporated; further Haggerty discloses wherein implementing the directive, the method further comprises a step of: instantiating managed entity object types (pg. 76, col. 1, par. 2 'The topology objects are created through OpenView Map additions to the MOM').

Regarding Claim 23: The rejection of claim 21 is incorporated; further Haggerty discloses wherein implementing the directive the method further comprises a step of: effecting a change in a network state of a managed data transport network in a realm of management (pg. 78, col. 1, par. 1 'The ProSphere user interfaces use the compiled stubs from IDL to interact with the objects').

Regarding Claim 24: The rejection of claim 12 is incorporated; further Haggerty discloses wherein subsequent to processing the at least one message received by the

framework; the method further comprises a step of: sending a message to the software application (pg. 78, col. 2, par. 2 'integrates with OpenView').

Regarding Claim 25: The rejection of claim 12 is incorporated; further Haggerty discloses registering at least one method associated with at least one derived managed entity object type (pg. 77, col. 1, par. 1 'the derived objects ... implement most of their properties and functions').

Regarding Claim 26: The rejection of claim 25 is incorporated; further Haggerty discloses making a dictionary entry in a dictionary, the dictionary entry specifying a name associated with the registered method (pg. 75, col. 1, par. 5 'provides the ability to bind a name to an object reference').

Regarding Claim 27: The rejection of claim 25 is incorporated; further Haggerty discloses wherein making the dictionary entry in the dictionary, the method further comprises a step of using name spaces techniques to associate derived managed entity object types with corresponding registered methods (pg. 75, col. 1, par. 5 'provides the ability to bind a name to an object reference').

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2 and 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over “The Benefits of CORBA-Based Network Management” by Haggerty and Seetharaman (Haggerty).

Regarding Claim 2: The rejection of claim 1 is incorporated; further while Haggerty does not explicitly disclose the specification includes at least one attribute, he does disclose that the object being derived from the specification allows for attributes (pg. 77, col. 1, par. 1 ‘the derived objects ... implement most of their properties and functions’). It would therefore have been obvious to a person of ordinary skill in the art at the time of the invention to include specification of at least one attribute in the specification.

Regarding Claim 5: The rejection of claim 1 is incorporated; further while Haggerty does not explicitly disclose the specification includes at least one method, he does disclose that the object being derived from the specification allows for methods (pg. 77, col. 1, par. 1 ‘the derived objects ... implement most of their properties and functions’). It would therefore have been obvious to a person of ordinary skill in the art at the time of the invention to include specification of at least one implementation of at least one method in the specification.

Regarding Claim 6: The rejection of claim 1 is incorporated; further while Haggerty does not explicitly disclose at least one directive includes an attribute specification, he does disclose that the object being derived from the specification allows for attributes (pg. 77, col. 1, par. 1 ‘the derived objects ... implement most of their properties and functions’). It would therefore have been obvious to a person of ordinary skill in the art

at the time of the invention to include at least one directive specifying of at least one attribute.

Regarding Claim 7: The rejection of claim 6 is incorporated; further while Haggerty does not explicitly disclose the attribute specification further specifies managed entity object type inheritance, he does disclose that the object being derived from the specification allows for inheritance (pg. 77, col. 1, par. 1 'higher level objects implement most of their properties and functions'). It would therefore have been obvious to a person of ordinary skill in the art at the time of the invention to further specify managed entity object type inheritance.

Regarding Claim 15: The rejection of claim 14 is incorporated; further Haggerty discloses wherein run-time registering the at least one plug-in, the method further comprises a prior step of: selecting the at least one plug-in for registration thereof (pg. 76, col. 1, par. 2 'The topology objects are created through OpenView Map additions to the MOM').

While Haggerty does not explicitly disclose selecting the at least one plug-in for registration thereof, It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide a user with the ability to select the at least one plug-in for registration thereof, instead of having to re-define the managed data network entity prior to adding it to the MOM.

Regarding Claim 17: The rejection of claim 16 is incorporated; further Haggerty discloses run-time loading the at least one managed data network entity specification, the method further comprises a prior step of: selecting the at least one managed data

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network entity specification (pg. 76, col. 1, par. 2 'The topology objects are created through OpenView Map additions to the MOM').

While Haggerty does not explicitly disclose selecting the at least one managed data network entity specification, It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide a user with the ability to select the at least one managed data network entity specification instead of having to re-define the managed data network entity prior to adding it to the MOM.

9. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over "The Benefits of CORBA-Based Network Management" by Haggerty and Seetharaman (Haggerty) in view of US 5,911,076 to Acker et al (Acker).

Regarding Claim 3: The rejection of claim 1 is incorporated further Haggerty does not disclose the managed data network entity specification includes a human readable file but does disclose the use of an IDL (pg. 76, col. 2, par. 5 'The managed object supports an IDL interface')

Acker teaches that the SOM compiler generates a human-readable file (col. 5, lines 27-30 'the output forms can be ... a documentation file ... a printed interface description') from an Interface Definition Language (IDL) definition (col. 5, lines 7-8 'The SOM compiler reads the IDL definition of a class interface and generates several different output files') in an analogous art for the purpose of documenting the interfaces of classes.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to use a complier as taught in Acker (col. 5, lines 7-8) to generate the IDL interfaces disclosed in Haggerty (pg. 76, col. 2, par. 5) thereby producing the 'printed interface description', because one of ordinary skill in the art would have been motivated to provide documentation for the interfaces (col. 5, lines 27-30)

Regarding Claim 4: The rejection of claim 3 is incorporated further Haggerty does not disclose discloses the human-readable file is an attribute file holding attributes corresponding to a single managed entity object type but does disclose the use of an IDL (pg. 76, col. 2, par. 5 'The managed object supports an IDL interface').

Acker teaches the human-readable file is an attribute file holding attributes corresponding to a single managed entity object type (col. 5, lines 27-30 'the output forms can be ... a printed interface description') in an analogous art for the purpose of documenting the interfaces of classes.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to use a complier as taught in Acker (col. 5, lines 7-8) to generate the IDL interfaces disclosed in Haggerty (pg. 76, col. 2, par. 5) thereby producing the 'printed interface description', because one of ordinary skill in the art would have been motivated to provide documentation for the interfaces (col. 5, lines 27-30).

Double Patenting

10. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to

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identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

11. Claims 12-24 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 12-24 of copending Application No. 10/021,080.

This is a provisional double patenting rejection since the conflicting claims have not in fact been patented. Claims 12-24 of the instant application are identical to 12-24, respectively, in application 10/021,080.

12. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

13. Claims 1-4 and 6-11 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims

1 and 3-11 of copending Application No. 10/021,080 in view of “The Benefits of CORBA-Based Network Management” by Haggerty and Seetharaman (Haggerty).

This is a provisional obviousness-type double patenting rejection.

Claims 1 and 11 of the instant application differ from claims 1 and 11 of the 080 application only in the addition of item 'd. a dictionary holding a roster of function names ... defining methods associated with derived entity object types'

Haggerty teaches 'a dictionary holding a roster of function names ... defining methods associated with derived entity object types' (pg. 75, col. 1, par. 2 'The first type consists of ... the OMG Naming Service') in an analogous art for the purpose of providing a lookup mechanism (pg. 75, col. 1, par. 4 'The naming service ... is used as a ... lookup mechanism').

It would have been obvious to a person of ordinary skill in the art at the time of the invention to include a dictionary as taught in Haggerty because one of ordinary skill in the art would have been motivated to provide a lookup mechanism (pg. 75, col. 1, par. 4 'The naming service ... is used as a ... lookup mechanism').

Further dependent claims 2-4 and 6-10 are identical to dependent claims 3-10 of the 080 application.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

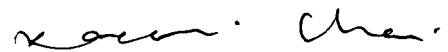
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Mitchell whose telephone number is (571) 272-3728. The examiner can normally be reached on Monday-Thursday and alternate Fridays 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason Mitchell
3/17/05



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SUPERVISORY PATENT EXAMINER
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